

## **Amendment to the Claims**

1-30 Cancelled

- 31. (New) A method comprising administering methyl pyruvate to a human being which results in an increase of cell energy production, muscle energy production, muscle respiration and performance.
- 32. (New) A method comprising administering methyl pyruvic acid to a human being which results in an increase in cell energy production, muscle energy production, muscle respiration and performance.
- 33. (New) A method comprising administering methyl pyruvate to a human being which results in increasing methyl pyruvate levels in a human being.
- 34. (New) A method comprising administering methyl pyruvic acid to a human being which results in increasing methyl pyruvate acid levels in a human being.
- 35. (New) The method in accordance with Claim 32, wherein the method of administering methyl pyruvic acid is selected from the group consisting of being infused and orally administered.
- 36. (New) The method in accordance with Claim 31, wherein the method of administering methyl pyruvate is selected from the group consisting of being infused and orally administered.
- 37. (New) The method in accordance with Claim 36, wherein the methyl pyruvate administered is a monovalent cation selected from the group consisting of sodium and potassium methyl pyruvate.

38. (New) The method in accordance with Claim 36, wherein the methyl pyruvate administered is a salt of methyl pyruvate which is a divalent cation selected from the group consisting of calcium and magnesium methyl pyruvate.
39. (New) The method in accordance with Claim 36, wherein the methyl pyruvate administered includes analogs of methyl pyruvate which act as a substrate or substrate analog.
40. (New) The method in accordance with Claim 36, wherein the methyl pyruvate consists of a composition of pharmacologically acceptable excipient and/or diluent therefor.
41. (New) The method in accordance with Claim 40, wherein the methyl pyruvate further comprises coenzymes.
42. (New) The method in accordance with Claim 40, wherein the composition of a pharmacologically acceptable and/or diluent therefor is delivered by selection from a group consisting of: oral administration, dietary supplement and pharmacological drug.
43. (New) The method in accordance with Claim 41, wherein the composition of coenzyme is administered from the group consisting of oral administration, dietary supplement and pharmacological drug.
44. (New) The method in accordance with Claim 32, wherein the method of administration is selected from the group consisting of lozenges, tablets, pills, capsules, powders, granulates, sachets, syrups and vials.
45. (New) The method in accordance with Claim 43, wherein the method of administration is selected from the group consisting of lozenges, tablets, pills, capsules, powders, granulates, sachets, syrups and vials.
46. (New) The method in accordance with Claim 44, wherein the compound is administered in unit dosage form, comprising from about 100 mg to about 28 grams.

47. (New) The method in accordance with Claim 45, wherein the compound is administered in unit dosage form, comprising from about 100 mg to about 28 grams.
48. (New) The method in accordance with Claim 46, which further comprises creatine compounds, which can be used in the present method selected from the group consisting of creatine analogs which can act as reversible or irreversible inhibitors of creatine kinase.
49. (New) The method in accordance with Claim 47, which further comprises creatine compounds, which can be used with the present method which include creatine analogs which can act as reversible or irreversible inhibitors of creatine kinase.
50. (New) The method in accordance with Claim 35, wherein the methyl pyruvate acts as a substrate or substrate analog.
51. (New) The method in accordance with Claim 35, wherein methyl pyruvic acid consists of a composition of a pharmacologically acceptable excipient and/or diluent therefor.
52. (New) The method in accordance with Claim 51, wherein the methyl pyruvate further comprises coenzymes.
53. (New) The method in accordance with Claim 51, wherein the administration is selected from the group consisting of: oral administration, dietary supplement and pharmacological drug.
54. (New) The method in accordance with Claim 52, wherein the method of administration is selected from the group consisting of oral administration, dietary supplement and pharmacological drug.
55. (New) The method in accordance with Claim 53, wherein the method of administration is selected from the group consisting of lozenges, tablets, pills, capsules, powders, granulates, sachets, syrups and vials.

56. (New) The method in accordance with Claim 54, wherein the method of administration is selected from the group consisting of lozenges, tablets, pills, capsules, powders, granulates, sachets, syrups and vials.
57. (New) The method in accordance with Claim 55, wherein the unit dosage comprises from about 100 mg to about 28 grams.
58. (New) The method in accordance with Claim 56, wherein the unit dosage comprises from about 100 mg to about 28 grams.
59. (New) The method in accordance with Claim 57, which further comprises creatine compounds, which can be used in the present method which include creatine analogs which can act as reversible or irreversible inhibitors of creatine kinase.
60. (New) The method in accordance with Claim 58, which further comprises creatine compounds, which can be used in the present method including creatine analogs which can act as reversible or irreversible inhibitors of creatine kinase.